

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW JERSEY  
NEWARK VICINAGE**

KEYNETIK, INC.,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD., and  
SAMSUNG ELECTRONICS AMERICA, INC.,

Defendants.

C.A. NO. \_\_\_\_\_

**JURY TRIAL DEMANDED**

**COMPLAINT**

Plaintiff KEYnetik, Inc. (“KEYnetik”), by and through its attorneys, for its Complaint against Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (collectively, “Defendants” or “Samsung”), hereby alleges as follows:

**NATURE OF THE ACTION**

1. This is an action arising under the patent laws of the United States (35 U.S.C. § 100 *et seq.*) based upon Samsung’s infringement of U.S. Patent Nos. 7,966,146 (the “146 Patent”) and 8,370,106 (the “106 Patent”) (collectively, the “Patents-in-Suit”).

**PARTIES**

2. KEYnetik is a Virginia corporation and has a place of business at 2883 Franklin Oaks Drive, Herndon, VA 20171. KEYnetik is a pioneer in motion input for personal electronic devices. In particular, KEYnetik pioneered devices and methods of interpreting a user’s motion

input to a personal electronic device while filtering out interference from accidental user motion and other external forces.

3. Defendant Samsung Electronics Co., Ltd. (“SEC”) is a Korean corporation with its principal place of business located at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, South Korea. SEC sells wireless mobile devices and related services.

4. Defendant Samsung Electronics America, Inc. (“SEA”) is a New York corporation with its principal place of business at 85 Challenger Road, Ridgefield Park, New Jersey 07660. SEA sells wireless mobile devices and related services.

### **JURISDICTION AND VENUE**

5. This is an action for infringement of United States patents arising under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*, including but not limited to 35 U.S.C. §§ 271 and 281.

6. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

7. The Court has personal jurisdiction over Samsung because, among other things, Samsung has committed and continues to commit acts of patent infringement within the United States and this Judicial District, in violation of 35 U.S.C. § 271.

8. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391(b), 1391(c), and 1400(b) because SEA is headquartered within this Judicial District, Samsung has committed and continues to commit acts of patent infringement in this Judicial District, has induced and is continuing to induce others to infringe the Patents-in-Suit in this District, provides a substantial volume of goods to this District, and does a substantial amount of business within this District, and thus has purposefully availed itself of the privilege of conducting business within the State of New Jersey and this Judicial District.

### **BACKGROUND FACTS**

9. In general, the Patents-in-Suit claim and describe the use of motion sensing technology in mobile devices. KEYnetik built a prototype of a mobile device having the motion-enabled user interface disclosed in KEYnetik's patent portfolio. KEYnetik has participated in numerous mobile communications events, some of which have been sponsored by Symbian, Nokia and Samsung, and has demonstrated its motion sensing applications.

10. Based on some of the demonstrations referenced above, Samsung expressed interest in and reviewed the KEYnetik technology. Samsung was particularly interested in KEYnetik's motion recognition technology using accelerometers in mobile devices, which is claimed by the Patents-in-Suit.

11. In early 2009, a high-level Samsung executive contacted KEYnetik and stated that Samsung was interested in KEYnetik's technology. Consequently, KEYnetik was invited to attend a Samsung event in March 2009. KEYnetik attended this meeting and gave a detailed presentation of its various, patented and patent pending motion-sensing and mobile device input technologies. Samsung representatives reviewed KEYnetik's draft slides, which included information about KEYnetik's pending and issued patents and technologies, and these slides were discussed in detail during the meeting. The attendees at this event included global Samsung representatives from at least the following business units: Research and Development Planning (Mobile Communications Division); Mobile Communications Marketing; Mobile Communications Development; Technology Incubation and Planning; Future Product Planning; Technology Outsourcing; Samsung Telecommunications America (Research and Development Center); and Samsung Ventures.

12. In April 2009, KEYnetik and Samsung entered into a non-disclosure agreement. Samsung initiated this transaction, pursuant to its interest from the Samsung event referenced above. The purpose of the agreement was to explore a business opportunity to develop a mobile phone (or personal digital assistant ["PDA"]) using the KEYnetik technology. In July 2009, Samsung informed KEYnetik that its Product Planning division was interested particularly in KEYnetik's motion user interface applications, and that Samsung would like to further evaluate KEYnetik's Hi-N-Bye and Rock-N-Scroll software. Responsive to this request, KEYnetik sent demonstration software to Samsung for evaluation, and made additional disclosures regarding KEYnetik's technologies. After email exchanges regarding these technologies, KEYnetik heard nothing further from Samsung until 2011.

13. In March 2011, KEYnetik was approached by a representative of Samsung's International Purchasing Center. This representative met with KEYnetik and once more requested details of KEYnetik's technology, which KEYnetik provided to Samsung. In August 2011, KEYnetik provided yet more requested information to Samsung regarding KEYnetik's software, technology and intellectual property. After this exchange, KEYnetik heard nothing more from Samsung until 2014.

14. On October 24, 2013, KEYnetik sent a letter to Samsung again informing them of the KEYnetik Patents and inviting licensing discussions. Samsung did not respond to this communication.

15. Contact was made anew with Samsung in February 2014. KEYnetik and Samsung subsequently exchanged numerous communications between February and July 2014. In July 2014, Samsung informed KEYnetik that Samsung was no longer interested in a business arrangement with KEYnetik

**THE PATENTS-IN SUIT**

16. KEYnetik is the owner, by assignment, of the entire right, title and interest in the '146 Patent, which validly issued on June 21, 2011. A copy of the '146 Patent is attached hereto as Exhibit A.

17. KEYnetik is owner, by assignment of the entire right, title and interest in the '106 Patent, which validly issued on February 5, 2013. A copy of the '106 Patent is attached hereto as Exhibit B.

**SAMSUNG'S INFRINGEMENT OF THE PATENTS-IN-SUIT**

18. As described below, Samsung infringes the claims of each of the Patents-in-Suit directly (alone or jointly) and/or indirectly by contributing to and/or inducing direct infringement by others by making, using, offering for sale, importing into the United States, and/or encouraging the manufacture, use, and sale of devices and/or services. For example, Samsung's Galaxy series smartphones (collectively, the "Accused Products") embody (in whole or in part) the apparatuses or practice the methods claimed by the Patents-in-Suit. A list of the Accused Products is attached as Appendix A.

19. The Accused Products are mobile devices, such as smartphones and tablets, having motion-sensing technology that are covered by one or more claims of the Patents-in-Suit. This motion-sensing technology is utilized and/or controlled by various applications, such as Samsung's Direct Call, Smart Alert, Turn Over to Mute/Pause, Tilt to Zoom, Pan to Move Icon, Pan to Browse Images, reasonably similar features, and/or related software in the software stack (the "Relevant Software"). The Accused Products together with the Relevant Software meet the limitations of the Patents-in-Suit literally and/or under the doctrine of equivalents.

20. Samsung has had actual and/or constructive notice of the Patents-in-Suit prior to the filing of this lawsuit and has known that its actions constitute infringement of the Patents-in-Suit. As described above in Paragraphs 9-15, Samsung and KEYnetik engaged in extensive discussions regarding the technology claimed and described by the Patents-in-Suit. During these discussions, KEYnetik exchanged demonstration software and other information to Samsung which notified Samsung (actually or constructively) that it infringed the Patents-in-Suit. Samsung also received notice of its infringement of the Patents-in-Suit at least as early as the date of service of this Complaint. Therefore, Samsung has engaged in egregious misconduct, as it was aware of the Patents-in-Suit or willfully blinded itself as to the existence of the Patents-in-Suit, and made, used, sold, offered to sell, imported and/or encouraged the making, using, selling, offering to sell, or importing of the Accused Products despite knowing that its actions constituted infringement of the Patents-in-Suit at all times relevant to this suit.

**COUNT I**  
**INFRINGEMENT OF THE '146 PATENT**

21. The allegations of every preceding paragraph in this Complaint are incorporated herein by reference.

22. Samsung has and continues to directly infringe alone or jointly, literally and/or under the doctrine of equivalents, because it has and continues to make, use, offer for sale, sell, and/or import the Accused Products in the United States without the authority of the owner of the '146 Patent in violation of 35 U.S.C. § 271(a). The Accused Products satisfy each and every element of the claims of the '146 Patent. For example, in regard to Claim 22, the Accused Products include one or more microprocessors that receive data from one or more accelerometers to translate sensed movement into a command and process and execute the command per instructions from one or more of the Relevant Software. After the command is executed, the one

or more of the Relevant Software sends a sleep command to microprocessor. It is readily apparent that the sleep command is executed, otherwise the Relevant Software commands would be executed unintentionally. Likewise, one or more of the Relevant Software will send instructions to re-activate motion sensing after a defined period of time has elapsed. Again, this is readily apparent because otherwise the Relevant Software would not regain its functionality.

23. Despite its knowledge or willful blindness of the '146 Patent described above, Samsung has intentionally and actively induced others, such as its customers, end users, distributors, and/or retailers, to make, use, offer for sale, sell, and/or import the Accused Products without the authority of the owner of the '146 Patent in violation of 35 U.S.C. § 271(b), for example through joint business planning, the provision of advertisements, technical specifications, instructional and/or promotional materials provided in connection with the Accused Products, including for example the associated user manuals and other materials that instruct and encourage the purchaser to use the products in a manner that Samsung knows to infringe.

24. Despite its knowledge or willful blindness of the '146 Patent described above, Samsung has and continues to sell, offer for sale, and/or import into United States the Accused Products without the authority of the owner of the '146 Patent in violation of 35 U.S.C. § 271(c).

25. Samsung knew at all times relevant to this Complaint that the Accused Products are especially made or especially adapted for use in the inventions claimed by the '146 Patent and are not staple articles of commerce suitable for non-infringing use.

26. KEYnetik has sustained, is sustaining, and will continue to sustain damages owing to Samsung's infringement of the '146 Patent.

27. Samsung's infringement of the '146 Patent is continuing and is expected to continue unless enjoined by this Court. KEYnetik does not have an adequate remedy at law, will be irreparably harmed if Samsung's infringement of the '146 Patent is permitted to continue, and is therefore entitled to an injunction against further infringement by Samsung pursuant to 35 U.S.C. § 283.

28. Samsung's infringement of the '146 Patent amounts to egregious and exceptional misconduct and KEYnetik is therefore entitled to recover treble damages under 35 U.S.C. § 284 and reasonable attorneys' fees incurred in prosecuting this action under 35 U.S.C. § 285.

**COUNT II**  
**INFRINGEMENT OF THE '106 PATENT**

29. The allegations of every preceding paragraph in this Complaint are incorporated herein by reference.

30. Samsung has and continues to directly infringe alone or jointly, literally and/or under the doctrine of equivalents, because it has and continues to make, use, offer for sale, sell, and/or import the Accused Products in the United States without the authority of the owner of the '106 Patent in violation of 35 U.S.C. § 271(a). The Accused Products satisfy each and every element of the claims of the '106 Patent. For example, in regard to Claim 1, the Accused Products include one or more microprocessors in communication with memory and one or more motion sensors (e.g., accelerometers) in communication with the microprocessor. The microprocessor receives movement data from the accelerometer. The Relevant Software also include managers to execute on the microprocessors and control motion and orientation detectors, and an inference state machine in communication with the manager, which maintains a sequence of detected orientations in a slow motion phases. Relevant Software on the Accused Products produce a profile description (e.g., the Accused Product is at rest, orientation face up,



motion, rest, orientation top up) for the sequence of detected orientations, and output an event (e.g., a Relevant Software function such as placing an outgoing call) corresponding to the profile description.

31. Despite its knowledge or willful blindness of the '106 Patent described above, Samsung has intentionally and actively induced others, such as its customers, end users, distributors, and/or retailers, to make, use, offer for sale, sell, and/or import the Accused Products without the authority of the owner of the '106 Patent in violation of 35 U.S.C. § 271(b), for example through joint business planning, the provision of advertisements, technical specifications, instructional and/or promotional materials provided in connection with the Accused Products, including for example the associated user manuals and other materials that instruct and encourage the purchaser to use the products in a manner that Samsung knows to infringe.

32. Despite its knowledge or willful blindness of the '106 Patent described above, Samsung has and continues to sell, offer for sale, and/or import into United States the Accused Products without the authority of the owner of the '106 Patent in violation of 35 U.S.C. § 271(c).

33. Samsung knew at all times relevant to this Complaint that the Accused Products are especially made or especially adapted for use in the inventions claimed by the '106 Patent and are not staple articles of commerce suitable for non-infringing use.

34. KEYnetik has sustained, is sustaining, and will continue to sustain damages owing to Samsung's infringement of the '106 Patent.

35. Samsung's infringement of the '106 Patent is continuing and is expected to continue unless enjoined by this Court. KEYnetik does not have an adequate remedy at law, will be irreparably harmed if Samsung's infringement of the '106 Patent is permitted to continue, and

is therefore entitled to an injunction against further infringement by Samsung pursuant to 35 U.S.C. § 283.

36. Samsung's infringement of the '106 Patent amounts to egregious and exceptional misconduct and KEYnetik is therefore entitled to recover treble damages under 35 U.S.C. § 284 and reasonable attorneys' fees incurred in prosecuting this action under 35 U.S.C. § 285.

### **PRAYERS FOR RELIEF**

WHEREFORE, the Plaintiffs respectfully request this Court to enter judgment in their favor against Samsung and to grant the following relief:

A. an adjudication that Samsung has infringed one or more claims of each of the Patents-in-Suit pursuant to 35 U.S.C. §§ 271(a), 271(b), and/or 271(c);

B. a judgment declaring that continuing manufacture, use, offer for sale, sale, and/or importation of Accused Products, or inducement of or contribution to such conduct, by Samsung would constitute infringement of one or more claims of each of the Patents-in-Suit pursuant to 35 U.S.C. §§ 271(a), 271(b), and/or 271(c);

C. a permanent injunction enjoining Samsung and its corresponding officers, agents, servants, employees, attorneys, affiliates, divisions, subsidiaries, and all persons in active concert or participation with any of them, from infringing the Patents-in-Suit, and/or contributing to or inducing anyone to do the same, including manufacture, use, offer to sell, sale, and/or importation of Accused Products before the expiration of the Patents-in-Suit;

D. an award of damages sustained by Plaintiffs as a result of Samsung's infringement of the Patents-in-Suit, in an amount to be ascertained at trial, including at least a reasonable royalty on sales of Accused Products and/or Plaintiffs' lost profits;

E. an assessment of prejudgment and post-judgment interest and costs against Samsung, together with an award of such interest and costs, in accordance with 35 U.S.C. §284;

F. a determination that Samsung's infringement has been willful and an award of treble damages pursuant to 35 U.S.C. § 284;

G. a determination that this is an exceptional case and a corresponding award of reasonable attorneys' fees, pursuant to 35 U.S.C. § 285; and

H. such other or further relief as this Court may deem just and proper.

**JURY DEMAND**

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiffs demand a trial by jury on all issues properly so triable.

Date: April 24, 2017

Respectfully submitted,

By: /s/ Thomas S. Biemer  
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**APPENDIX A**

Galaxy Alpha	Galaxy Note 7	Galaxy S Relay	Galaxy S8 Edge
Galaxy Appeal	Galaxy Note Edge	Galaxy S Relay 4G	Galaxy Stardust
Galaxy Avant	Galaxy Note Pro	Galaxy S4	Galaxy Stellar
Galaxy Centura	Galaxy Prevail 2	Galaxy S4 mini	Galaxy Stratosphere II
Galaxy Core Prime	Galaxy Prevail LTE	Galaxy S4 PrePaid	Galaxy Tab 3
Galaxy Discover	Galaxy Proclaim	Galaxy S5	Galaxy Tab 4
Galaxy Express GoPhone	Galaxy Reverb	Galaxy S5 Active	Galaxy Tab 4 NOOK
Galaxy Grand Prime	Galaxy Ring	Galaxy S5 mini	Galaxy Tab A
Galaxy J1	Galaxy Rugby Pro	Galaxy S5 Sport	Galaxy Tab E
Galaxy J3	Galaxy Rush	Galaxy S6	Galaxy Tab E Lite
Galaxy Mega	Galaxy S Blaze	Galaxy S6 active	Galaxy Tab E NOOK
Galaxy Nexus	Galaxy S Blaze 4G	Galaxy S6 edge	Galaxy Tab S
Galaxy Note 2	Galaxy S II	Galaxy S6 edge+	Galaxy Tab S2
Galaxy Note 3	Galaxy S II 4G	Galaxy S7	Galaxy Tab S2 NOOK
Galaxy Note 4	Galaxy S III	Galaxy S7 edge	Galaxy Victory 4G LTE
Galaxy Note 5	Galaxy S III mini	Galaxy S8	Galaxy View